

What is claimed is:

[c01] 1. A patient-centric data acquisition protocol selection system comprising:

a programmable identification tag capable of allowing predetermined information about a patient to be stored therein and retrieved therefrom;

a medical imaging system capable of communicating with the programmable identification tag; and

programming associated with the medical imaging system for selecting an optimal data acquisition protocol;

wherein the medical imaging system reads information from the programmable identification tag and then the programming selects an optimal data acquisition protocol based, at least in part, on the predetermined information about the patient that is stored in the programmable identification tag.

[c02] 2. The patient-centric data acquisition protocol selection system of claim 1, wherein the predetermined information comprises at least one of: a patient's name, a patient's address, a patient's age, a patient's phone number, a patient's e-mail address, a patient's gender, a patient's social security number, a patient's height, a patient's weight, a patient's allergies, a patient's medical insurance information, a patient's emergency contact information, a patient's medical history, a patient's contraindications, a previous protocol used on the patient, a patient's previous reactions to oral or intravenous contrast agents or other medicines, a previous medical image of the patient, information derived from a previous medical image of the patient, a patient's fat percent, a patient's organ location, a patient's bone mineral density, a patient's body composition, a diagnosis from a patient's medical history, a treatment from a patient's medical history, an operator comment on a prior protocol used, and demographic information related to a patient.

[c03] 3. The patient-centric data acquisition protocol selection system of claim 1, wherein the medical imaging system comprises at least one of: an ultrasound system, a magnetic resonance imaging system, an x-ray system, a

computed tomography system, a positron emission tomography system, a nuclear medicine system, and combinations thereof.

[c04]           4.       The patient-centric data acquisition protocol selection system of claim 1, wherein the programmable identification tag further comprises a security feature capable of restricting access to the identification tag to predetermined systems or individuals.

[c05]           5.       The patient-centric data acquisition protocol selection system of claim 1, further comprising:

                updating means for saving new information to the programmable identification tag.

[c06]           6.       The patient-centric data acquisition protocol selection system of claim 1, wherein the predetermined information is automatically transferred between the programmable identification tag and the medical imaging system upon the occurrence of a predetermined event.

[c07]           7.       The patient-centric data acquisition protocol selection system of claim 6, wherein the predetermined event comprises at least one of: the programmable identification tag enters a predetermined area, the programmable identification tag gets within a predetermined distance of a device capable of reading from or writing to the programmable identification tag, the programmable identification tag is connected to the medical imaging system, and upon command.

[c08]           8.       The patient-centric data acquisition protocol selection system of claim 1, wherein the programmable identification tag comprises at least one of: a pin, a bracelet, a necklace, a badge, a card, and a patch.

[c09]           9.       The patient-centric data acquisition protocol selection system of claim 1, wherein the programmable identification tag further comprises at least one monitor.

**[c10]** 10. A patient-centric data acquisition protocol selection method comprising the steps of:

providing an identification tag to a patient, the identification tag being capable of storing predetermined information about the patient therein and allowing the stored predetermined information about the patient to be retrieved therefrom;

transferring the predetermined information about the patient from the identification tag to a medical imaging system;

selecting an optimal data acquisition protocol based, at least in part, on the predetermined information about the patient that is transferred to the medical imaging system;

performing a medical imaging scan of the patient utilizing the optimal data acquisition protocol; and

generating an image of an area of interest of the patient from data acquired during the medical imaging scan.

**[c11]** 11. The patient-centric data acquisition protocol selection method of claim 10, wherein the predetermined information comprises at least one of: a patient's name, a patient's address, a patient's age, a patient's phone number, a patient's e-mail address, a patient's gender, a patient's social security number, a patient's height, a patient's weight, a patient's allergies, a patient's medical insurance information, a patient's emergency contact information, a patient's medical history, a patient's contraindications, a previous protocol used on the patient, a patient's previous reactions to oral or intravenous contrast agents or other medicines, a previous medical image of the patient, information derived from a previous medical image of the patient, a patient's fat percent, a patient's organ location, a patient's bone mineral density, a patient's body composition, a diagnosis from a patient's medical history, a treatment from a patient's medical history, an operator comment on a prior protocol used, and demographic information related to a patient.

**[c12]** 12. The patient-centric data acquisition protocol selection method of claim 11, wherein the medical imaging system comprises at least one of: an

ultrasound system, a magnetic resonance imaging system, an x-ray system, a computed tomography system, a positron emission tomography system, a nuclear medicine system, and combinations thereof.

[c13] 13. The patient-centric data acquisition protocol selection method of claim 10, further comprising:

storing results of the medical imaging scan of the patient on the identification tag.

[c14] 14. The patient-centric data acquisition protocol selection method of claim 10, wherein the predetermined information about the patient is transferred between the identification tag and the medical imaging system upon the occurrence of a predetermined event.

[c15] 15. The patient-centric data acquisition protocol selection method of claim 14, wherein the predetermined event comprises at least one of: the identification tag enters a predetermined area, the identification tag gets within a predetermined distance of a device capable of reading from or writing to the identification tag, the identification tag is connected to the medical imaging system, the identification tag is prompted to transfer predetermined information therefrom, and upon command.

[c16] 16. The patient-centric data acquisition protocol selection method of claim 10, wherein selecting an optimal data acquisition protocol comprises utilizing programming to automatically select the optimal data acquisition protocol for a given situation.

[c17] 17. The patient-centric data acquisition protocol selection method of claim 16, wherein the optimal data acquisition protocol is selected based on the predetermined information about the patient that is stored in the identification tag and at least one of: a doctor's desired diagnostic result, and previous data acquisition protocols utilized in similar situations.

[c18]            18.     A medical imaging system comprising:  
                 an identification tag associated therewith, comprising:  
                         means for storing predetermined information therein;  
                         means for allowing the predetermined information to be  
                         transferred to the medical imaging system upon the occurrence of a  
                         predetermined event; and  
                         means for allowing new information to be stored in the patient-  
                         centric identification tag; and  
                 programming associated with the medical imaging system for selecting an  
optimal data acquisition protocol based, at least in part, on the predetermined  
information that is transferred from the patient-centric identification tag to the  
medical imaging system.

[c19]            19.     The medical imaging system of claim 18, wherein the means  
for storing predetermined information therein comprises at least one of: read/write  
memory and data storage blocks.

[c20]            20.     The medical imaging system of claim 18, wherein the means  
for allowing the predetermined information to be transferred to the medical imaging  
system comprises at least one of the following: a radio frequency transmitter/receiver,  
an infra-red transmitter/receiver, and a land-based communications cable.

[c21]            21.     The medical imaging system of claim 18, wherein the  
predetermined information comprises at least one of: a patient's name, a patient's  
address, a patient's age, a patient's phone number, a patient's e-mail address, a  
patient's gender, a patient's social security number, a patient's height, a patient's  
weight, a patient's allergies, a patient's medical insurance information, a patient's  
emergency contact information, a patient's medical history, a patient's  
contraindications, a previous protocol used on the patient, a patient's previous  
reactions to oral or intravenous contrast agents or other medicines, a previous medical  
image of the patient, information derived from a previous medical image of the

patient, a patient's fat percent, a patient's organ location, a patient's bone mineral density, a patient's body composition, a diagnosis from a patient's medical history, a treatment from a patient's medical history, an operator comment on a prior protocol used, and demographic information related to a patient.

[c22]            22.     The medical imaging system of claim 18, wherein the medical imaging system comprises at least one of: an ultrasound system, a magnetic resonance imaging system, an x-ray system, a computed tomography system, a positron emission tomography system, a nuclear medicine system, and combinations thereof.

[c23]            23.     The medical imaging system of claim 18, wherein the identification tag further comprises a security feature capable of restricting access to the identification tag to predetermined systems or individuals.

[c24]            24.     The medical imaging system of claim 18, wherein the predetermined event comprises at least one of: the identification tag enters a predetermined area, the identification tag gets within a predetermined distance of a device capable of reading from or writing to the identification tag, the identification tag is connected to the medical imaging system, the identification tag is prompted to transfer predetermined information therefrom, and upon command.